

ABSTRACT OF THE DISCLOSURE

An apparatus comprising a de-interlacer circuit, a rate converter circuit and a synchronization circuit. The de-interlacer circuit may be configured to generate a first progressive signal having a first rate in response to an interlaced signal. The rate  
5 converter circuit may be configured to generate a second progressive signal having a second rate in response to the first progressive signal. The synchronization circuit may be configured to generate an output video signal synchronized with an output audio signal in response to an input audio signal and the second  
10 progressive signal.